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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/761,925 | 01/21/2004 | John I. Belisle | 758.1470USII | 2167 |
| 7590 | 03/21/2005 | | EXAMINER | |
| Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903 | | | SANDY, ROBERT JOHN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3677 | |

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/761,925 | BELISLE ET AL. |
| | Examiner Robert J. Sandy | Art Unit 3677 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 January 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1-31 is/are allowed.
- 6) Claim(s) 1-7 and 9-11 is/are rejected.
- 7) Claim(s) 8 and 12-16 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 January 2004 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/2/2004.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Objections

Claim 25 is objected to because of the following informalities: In claim 25, line 14, "bar" should be changed to - - member - -. Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-7 and 9-11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No 6,796,004, and over claims 1-26, 29 and 30 of U.S. Patent No. 6,634,607, each in view of Mlachnik (U. S. Patent No. 5,079,805), respectively. U.S. Patent Nos. 6,796,004 and 6,634,607 each claim a clamp comprising: a band having a main body and outwardly facing pockets, the band defining at least two fastener openings at the outwardly facing pockets; a sealing member that mounts between the outwardly facing pockets of the band, the sealing member having fastener openings that align with the fastener openings of the band; reinforcing members that mount in the outwardly facing pockets of the band, the reinforcing members having fastener openings that align with the fastener openings of the band; and bolts that pass through the fastener openings of the band, the fastener openings of the sealing member, and the fastener openings of the reinforcing members, the bolts having a threaded portion and an unthreaded shank;

(concerning claim 5) the sealing member includes concave surfaces that accept a portion of the band;

(concerning claim 6) the reinforcing members include convex surfaces that correspond to the concave surfaces of the sealing member;

(concerning claim 7) the band is doubled over the reinforcing members.

However, U.S. Patent Nos. 6,796,004 and 6,634,607 each do not claim wherein the threaded portion having an outer thread diameter greater than a diameter of the unthreaded shank; and (concerning claim 9) wherein the unthreaded shanks are sized to provide a loose slip fit within the fastener openings of the sealing member.

Mlachnik ('805) teaches a clamp having bolts (44) each having a threaded portion (88) and an unthreaded shank (90), the threaded portion having an outer thread diameter greater than a diameter of the unthreaded shank (see Figures 2, 3 and 4), and therefore enabling the unthreaded shanks are sized to provide a loose slip fit within the fastener openings of the sealing member. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the bolts claimed in U.S. Patent No. 6,796,004 and 6,634,607, with the bolts of Mlachnik ('805), since Mlachnik ('805) suggests that such a bolt (44) having an unthreaded shank (90) of a smaller diameter than the threaded portion (88) of the bolt allows the each bolt to be aligned easier with the aligned holes of the clamp (i.e., respective fastening openings of the band, sealing member, and reinforcing members) by having the bolt partially inserted into the respective fastening opening and with a threaded bore of the nut (78), thereby simplifying assembly of the clamp in use.

Concerning claims 2, 3, 4, 10 and 11, further modification of the bolts of Mlachnik ('805), to comprise dimensional diameters to: wherein the outer thread diameter of the threaded portion is at least 0.02 inch larger than the diameter of the unthreaded shank; (concerning claim 3) wherein the outer thread diameter of the threaded portion is at least 0.03 inch larger than the diameter of the unthreaded shank; (concerning claim 4) wherein the outer thread diameter of the threaded portion is at least 5 percent larger than the diameter of the unthreaded shank; (concerning claim 10) wherein the outer thread diameter of the bolts is at least 0.004 inch larger than the diameter of the fastener openings of the sealing member; and (concerning claim 11) wherein the outer thread diameter of the bolts is in the range of 0.004 to 0.007 inches larger than

the diameter of the fastener openings of the sealing member; would have been an obvious matter of design choice to both of U.S. Patent No. 6,796,004 and 6,634,607 since applicant has not disclosed that diameters solves any stated problem produces an unexpected result. A change in size or determination of dimensional characteristics are generally recognized as being within the level of ordinary skill in the art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cassel (U. S. Patent No. 4,813,720, cited by applicant) in view of Mlachnik (U. S. Patent No. 5,079,805). Cassel ('720) discloses a clamp (10) comprising: a band (12) having a main body and outwardly facing pockets (14, 16), the band defining at least two fastener openings (44) at the outwardly facing pockets; a sealing member (52) that mounts between the outwardly facing pockets of the band, the sealing member having fastener openings (i.e., "...the spline 52 are provided with a pair of spaced bolt holes...", col. 5, lines 25-26) that align with the fastener openings of the band; reinforcing members (62, 64) that mount in the outwardly facing pockets of the band, the reinforcing members having fastener openings (i.e., "The force bars 62 and 64 . . . are provided with a pair of spaced bolt holes which are disposed in alignment with each other

and in alignment with the bolt holes 44...”, col. 5, lines 24-26) that align with the fastener openings of the band; and bolts (72) that pass through the fastener openings of the band, the fastener openings of the sealing member, and the fastener openings of the reinforcing members, the bolts having a threaded portion and an unthreaded shank;

(concerning claim 5) the sealing member includes concave surfaces that accept a portion of the band;

(concerning claim 6) the reinforcing members include convex surfaces that correspond to the concave surfaces of the sealing member;

(concerning claim 7) the band is doubled over the reinforcing members.

However, Cassel ('720) does not disclose wherein the threaded portion having an outer thread diameter greater than a diameter of the unthreaded shank; and (concerning claim 9) wherein the unthreaded shanks are sized to provide a loose slip fit within the fastener openings of the sealing member.

Mlachnik ('805) teaches a clamp having bolts (44) each having a threaded portion (88) and an unthreaded shank (90), the threaded portion having an outer thread diameter greater than a diameter of the unthreaded shank (see Figures 2, 3 and 4), and therefore enabling the unthreaded shanks are sized to provide a loose slip fit within the fastener openings of the sealing member. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the bolts of Cassel ('720) with the bolts of Mlachnik ('805), since Mlachnik ('805) suggests that such a bolt (44) having an unthreaded shank (90) of a smaller diameter than the threaded portion (88) of the bolt allows the each bolt to be aligned easier with the aligned holes of the clamp (i.e., respective fastening openings of the band, sealing member, and reinforcing members) by having the bolt partially inserted into the respective fastening opening and with a threaded bore of the nut (78), thereby simplifying assembly of the clamp in use.

Concerning claims 2, 3, 4, 10 and 11, further modification of the bolts of Mlachnik ('805), to comprise dimensional diameters to: wherein the outer thread diameter of the threaded portion is at least 0.02 inch larger than the diameter of the unthreaded shank; (concerning claim 3) wherein the outer thread diameter of the threaded portion is at least 0.03 inch larger than the diameter of the unthreaded shank; (concerning claim 4) wherein the outer thread diameter of the

threaded portion is at least 5 percent larger than the diameter of the unthreaded shank: (concerning claim 10) wherein the outer thread diameter of the bolts is at least 0.004 inch larger than the diameter of the fastener openings of the sealing member; and (concerning claim 11) wherein the outer thread diameter of the bolts is in the range of 0.004 to 0.007 inches larger than the diameter of the fastener openings of the sealing member; would have been an obvious matter of design choices since applicant has not disclosed that diameters solves any stated problem produces an unexpected result. A change in size or determination of dimensional characteristics are generally recognized as being within the level of ordinary skill in the art.

Allowable Subject Matter

Claims 8 and 12-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 17-24, are allowed. Claims 25-31 would be in condition for allowance upon overcoming the objection to claim 25 indicated in this Office action.

The following is an examiner's statement of reasons for allowance:

Concerning claims 17-24, the prior art of record fails to teach or suggest the clamp having the fastener openings of the sealing member being tapered to have a major diameter at a first side of the sealing member and having a minor diameter at a second side of the sealing member, the taper defining a cone angle greater than 3 degrees; and reinforcing members that mount in the outwardly facing pockets of the band, the reinforcing members having fastener openings that align with the fastener openings of the band.

Concerning claims 25-31, the prior art of record fails to teach or suggest a clamp requiring the bolts having threads defining an outer thread diameter greater than a diameter defined by the fastener openings of the sealing member, and the sealing member including threads cut within the fastener openings of the sealing member by threading the bolts through the fastener openings.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONCLUSION

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. Sandy whose telephone number is 703-305-7413. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ROBERT J. SANDY
PRIMARY EXAMINER

Robert J. Sandy
Primary Examiner
Art Unit 3677